II. Listing of Claims

1 - 30. (Cancelled)

31. (Currently Amended): A method of heating a metal material for subsequent molding comprising the steps of:

introducing the metal material into a vessel having a member located within the vessel;

locating the metal material about the member;

heating the metal material ~~by~~ with low frequency induction heating ~~with~~ at an operating frequency of less than 1000 H_z to achieve a temperature for molding

maintaining a temperature gradient of less than 100° C through a wall thickness section of the vessel; and

ejecting the metal material from the vessel.

32. (Previously Presented): The method of claim 31 wherein said heating step further comprises the step of at least partially directly heating the metal material.

33. (Currently Amended): The method of claim 31 wherein said heating step includes the step of low frequency inductive heating of the vessel itself.

34. (Previously Presented): The method of claim 31 wherein said heating step includes the step of low frequency inductive heating of the member.

35. (Previously Presented): The method of claim 31 wherein said heating step includes the step of at least partially indirectly heating of the metal material.

36. (Previously Presented): The method of claim 31 wherein said heating step includes the step of low frequency inductive heating of the vessel, the member and the metal material.

37. (Original): The method of claim 31 further comprises the step of heating the metal material to a temperature above its solidus temperature, but not exceeding its liquidus temperature.

38. (Original): The method of claim 31 further comprising the step of stirring the metal material to decrease particle size and increase roundness of said solid phase in the metal material.

39. (Original): The method of claim 31 further comprising the step of heating the metal material to a temperature above its liquidus temperature.

40. (Original): The method of claim 31 further comprising the step of preheating the member and vessel.

41. (Currently Amended): The method of claim [[40]] 31 wherein said step includes the step of axially retracting the member within the vessel.

42. (Cancelled)

43. (Original): The method of claim 40 wherein said preheating step includes the step of inductively heating the member.

44. (Original): The method of claim 31 wherein said maintaining step maintains a temperature gradient of less than 50° C through a wall thickness section of the vessel.

45. (Original): The method of claim 31 wherein said maintaining step maintains a temperature gradient of about 25° C through a wall thickness section of the vessel.

46. (Previously Presented): The method of claim 31 wherein the heating step includes the step of extracting heat from the member to heat the metal material.

47. (Currently Amended): A method of heating a metal material for subsequent molding comprising the steps of:

introducing the metal material into a vessel having a member located within the vessel;

locating the metal material about the member;

heating the metal material ~~by~~ through low frequency induction heating ~~with~~ at an operating frequency of less than 1000 [[H_z]] Hz to achieve a temperature for molding; and

ejecting the metal material from the vessel.

48. (Previously Presented): The method of claim 47 further comprising the step of maintaining a temperature gradient of less than 100° C through the thickness of a wall section of the vessel.

49. (Previously Presented): The method of claim 47 wherein said ejecting step ejects the material out of the vessel under pressure.

50. (Previously Presented): The method of claim 47 wherein said ejecting step includes the step of retracting the member and advancing the member to eject the material.

51. (Previously Presented): The method of claim 47 further comprising the step of heating the material to a temperature between the solidus and liquidus temperatures of the material.

52. (Currently Amended): The method of claim 47 further comprising the step of stirring the metal material to decrease particle size and increase roundness of ~~said~~ a solid phase in the metal material.